CLAIMS

1. A method of screening for and /or diagnosis of a cardiovascular disorder in a subject, comprising the steps of:

(a) detecting and /or quantifying the level of a polypeptide in a biological sample from said subject, wherein the polypeptide is selected from:

i) a polypeptide comprising the amino acid sequence of SEQ ID NO:3;

ii) a variant, with at least 75% sequence identity, having one or more amino acid substitutions, deletions or insertions relative to the amino acid sequence of SEQ ID NO:3; and

iii) a fragment of a polypeptide as defined in i) or ii) above which is a least ten amino acids long; and

(b) comparing said level to that of a control sample,

wherein a decrease in said level relative to that of the control is indicative of a cardiovascular disorder.

2. A method of predicting a cardiovascular disorder in a subject, comprising the steps of:

(a) detecting and /or quantifying the level of a polypeptide in a biological sample from said subject, wherein the polypeptide is selected from:

i) a polypeptide comprising the amino acid sequence of SEQ ID NO:3;

ii) a variant, with at least 75% sequence identity, having one or more amino acid substitutions, deletions or insertions relative to the amino acid sequence of SEQ ID NO:3; and

iii) a fragment of a polypeptide as defined in i) or ii) above which is a least ten amino acids long; and

(b) comparing said level to that of a control sample,

wherein a decrease in said level relative to that of the control indicates a risk of developing a cardiovascular disorder.

3. The method of claim 1 or 2, wherein said polypeptide level is detected / quantified in combination with the level(s) of one or more of the following polypeptides: CPP 2, CPP 8, CPP 9, CPP 12, CPP 13, CPP 14, CPP 15, ,CPP 16, CPP 17, CPP 18, CPP 20, CPP 40, CPP 41, CPP 149, CPP 150, CPP 151, CPP 501, CPP 502, CPP 503, CPP 504, CPP 505, CPP 506, CPP 507, CPP 508, CPP 509.

4. The method of claims 1 to 3, wherein said cardiovascular disorder is Coronary Artery Disease (CAD).

5. The method of any one of claims 1 to 4, wherein said biological sample is plasma.

6. The method of any one of claims 1 to 5, wherein said polypeptide is detected and /or quantified by mass spectrometry.

7. The method of any one of claims 1 to 5, wherein said polypeptide is detected and /or quantified by Enzyme-Linked Immuno Sorbent Assay.

8. An isolated polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NOs:1-6, wherein said polypeptide is fused to a heterologous polypeptide sequence.

9. An anti-Cardiovascular disorder Plasma Polypeptide (CPP) antibody that selectively binds to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NOs:1-6.

10. A method of binding an antibody to a Cardiovascular disorder Plasma Polypeptide (CPP) comprising the steps of:
    i) contacting the antibody of claim 9 with a biological sample under conditions that permit antibody binding; and
    ii) removing contaminants.

11. The method of claim 10, wherein said antibody is attached to a label group.

12. The method of claim 10, wherein said sample is human plasma.

13. The use of at least one polypeptide selected from:
    i) a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NOs:1, 2 and 3;
    ii) a variant, with at least 75% sequence identity, having one or more amino acid substitutions, deletions or insertions relative to the amino acid sequence shown in SEQ ID

NOs:1, 2 and 3; and

iii) a fragment of a polypeptide as defined in i) or ii) above which is a least ten amino acids long;

in the preparation of a medicament for the prophylaxis and/or treatment of cardiovascular disorders or in the preparation of a drug-eluting stent.

14. The use of an antibody from claim 9 in the preparation of a medicament for the prophylaxis and/or treatment of cardiovascular disorders or in the preparation of a drug-eluting stent.

15. A method of identifying a Cardiovascular disorder Plasma Polypeptide (CPP) modulator comprising the steps of:

i) contacting a test compound with a polypeptide selected from the group consisting of SEQ ID NOs:1-6 under sample conditions permissive for at least one CPP biological activity;

ii) determining the level of said at least one CPP biological activity;

iii) comparing said level to that of a control sample lacking said test compound; and

iv) selecting a test compound which causes said level to change for further testing as a CPP modulator for the prophylactic and/or therapeutic treatment of cardiovascular disorders.

16. A method of identifying a modulator of a cardiovascular disorder comprising the steps of:

(a) administering a candidate agent to a non-human test animal which is predisposed to be affected or which is affected by the cardiovascular disorder;

(b) administering the candidate agent of (a) to a matched control non-human animal not predisposed to be affected or not being affected by the cardiovascular disorder;

(c) detecting and /or quantifying the level of a polypeptide in a biological sample obtained from the non-human test animal of step (a) and from the control animal of step (b), wherein the polypeptide is selected from:

i) a polypeptide comprising the amino acid sequence of SEQ ID NO: 3;

ii) a variant, with at least 75% sequence identity, having one or more amino acid substitutions, deletions or insertions relative to the amino acid sequence shown in SEQ ID NO: 3; and

iii) a fragment of a polypeptide as defined in i) or ii) above which is a least ten amino acids long; and

(d) comparing the levels of the polypeptide of step (c); wherein a displacement of the level of the polypeptide in the biological sample obtained from the non-human test animal towards the level of the polypeptide in the biological sample obtained from the control animal indicates that the candidate agent is a modulator of the cardiovascular disorder.

17. A method for monitoring the efficacy of a treatment of a subject having or at risk of developing a cardiovascular disorder with an agent, the method comprising:

(a) obtaining a pre-administration biological sample from the subject prior to administration of the agent;

(b) detecting and /or quantifying the level of a polypeptide in the biological sample from said subject, wherein the polypeptide is selected from:

i) a polypeptide comprising the amino acid sequence of SEQ ID NO: 3;

ii) a variant, with at least 75% sequence identity, having one or more amino acid substitutions, deletions or insertions relative to the amino acid sequence shown in SEQ ID NO: 3; and

iii) a fragment of a polypeptide as defined in i) or ii) above which is a least ten amino acids long; and

(c) obtaining one or more post-administration biological samples from the subject;

(d) detecting the level of the polypeptide in the post-administration sample or samples;

(e) comparing the level of the polypeptide in the pre-administration sample with the level of the polypeptide in the post- administration sample; and

(f) adjusting the administration of the agent accordingly.

18. The method of claim 16 or 17, wherein said polypeptide level is detected / quantified in combination with the level(s) of one or more of the following polypeptides: CPP 2, CPP 8, CPP 9, CPP 12, CPP 13, CPP 14, CPP 15, ,CPP 16, CPP 17, CPP 18, CPP 20, CPP 40, CPP 41, CPP 149, CPP 150, CPP 151, CPP 501, CPP 502, CPP 503, CPP 504, CPP 505, CPP 506, CPP 507, CPP 508, CPP 509.

19. The method of claim 16, wherein the non-human test animal which is predisposed to be affected or which is affected by the cardiovascular disorder comprises a decreased plasma level of a polypeptide selected from:

i) a polypeptide comprising the amino acid sequence of SEQ ID NO: 3;

ii) a variant, with at least 75% sequence identity, having one or more amino acid substitutions, deletions or insertions relative to the amino acid sequence shown in SEQ ID NO: 3; and

iii) a fragment of a polypeptide as defined in i) or ii) above which is a least ten amino acids long.

20. The method of claim 19, wherein the non-human test animal further comprises an alteration in the plasma level of one or more of the following polypeptides: CPP 2, CPP 8, CPP 9, CPP 12, CPP 13, CPP 14, CPP 15, ,CPP 16, CPP 17, CPP 18, CPP 20, CPP 40, CPP 41, CPP 149, CPP 150, CPP 151, CPP 501, CPP 502, CPP 503, CPP 504, CPP 505, CPP 506, CPP 507, CPP 508, CPP 509.